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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,462	02/09/2004	Ju-hyun Lee	1793.1200	3608
21171	7590	06/06/2007	EXAMINER	
STAAS & HALSEY LLP			NGO, HUYEN LE	
SUITE 700				
1201 NEW YORK AVENUE, N.W.			ART UNIT	
WASHINGTON, DC 20005			2871	
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			DELIVERY MODE	
			PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/773,462	<b>Applicant(s)</b> LEE, JU-HYUN	
	<b>Examiner</b> Julie-Huyen L. Ngo	<b>Art Unit</b> 2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-32 are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Election/Restrictions*

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-24, drawn to a Liquid Crystal Display (LCD), classified in class 349, subclasses 42 and 151.
- II. Claims 25-28, drawn to a liquid crystal display panel-processing device to process liquid crystal display panels, classified in class 349, subclass 189.  
Note that claims 25 and 26 are apparatus claims; therefore they cannot be depended from a device claim 24.
- III. Claims 29-32, drawn to a method of aligning liquid crystal in a liquid crystal display panel, classified in class 349, subclass 191.

The inventions are distinct, each from the other because of the following reasons:

Inventions III and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different processes, such as the process of applying the alignment signal voltage as the liquid crystal is injected into the liquid crystal display panel as recited in claim 31; or the process of applying the alignment signal voltage after the liquid crystal is injected into the liquid crystal display panel.

Inventions II and III are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different processes such as: a) the process of applying the alignment signal voltage as the liquid crystal is injected into the liquid crystal display panel as recited in claim 31; or b) the process of applying the alignment signal voltage occurs after the liquid crystal is injected into the liquid crystal display panel.

Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction were not required because the inventions have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

Further more this application contains claims directed to the following patentably distinct species:

**A.** Embodiment as recited in **claims 2, 5 and 17** with a liquid-crystal display comprising a first switching circuit **(44b)** placed between the first driving circuit **(44)** and the liquid crystal panel **(42)**; a first buffer circuit **(44a)** placed between the first driving circuit **(44)** and the first switching circuit **(44b)**, and a second buffer circuit **(46a)** placed between the second driving circuit **(46)** and the liquid crystal panel **(42)**.

**B.** Embodiment as recited in **claims 2 and 18** with a liquid-crystal display comprising a first switching circuit **(44b)** placed between the first driving circuit **(44)** and the liquid crystal panel **(42)**; and a second switching circuit **(46b)** placed between the second driving circuit **(46)** and the liquid crystal panel **(42)**. *There is no drawing to support the features recited in these claims!*

**C.** Embodiment as recited in **claims 3 and 6** with a liquid-crystal display comprising a second switching circuit **(46b)** placed between the liquid crystal panel **(42)** and the electrode pad unit **(48)**; and a second buffer circuit **(46a)** placed between the second driving circuit **(46)** and the liquid crystal panel **(42)**.

**D.** Embodiment as recited in **claims 4 and 7** with a liquid-crystal display comprising a second switching circuit **(46b)** placed between the second driving circuit **(46)** and the liquid crystal panel **(42)**; **and** a second buffer circuit **(46a)** placed between the second driving circuit **(46)** and the second switching circuit **(46b)**. *There is no drawing to support the features recited in these claims!*

**E.** Embodiment as recited in **claims 8 and 9** with a liquid-crystal display comprising a first switching circuit faces the first driving circuit with the liquid crystal panel **(42)** being placed between the first switching circuit **(44b)** and the first driving circuit **(44)**; **and** a second switching circuit **(46b)** placed between the liquid crystal panel **(42)** and the electrode pad unit **(48)**. *There is no drawing to support the features recited in these claims!*

F. Embodiment as recited in **claims 8 and 10**, with a liquid-crystal display comprising a first switching circuit faces the first driving circuit with the liquid crystal panel **(42)** being placed between the first switching circuit **(44b)** and the first driving circuit **(44)**; **and** a second switching circuit **(46b)** placed between the second driving circuit **(46)** and the liquid crystal panel **(42)**. *There is no drawing to support the features recited in these claims!*

G. Embodiment as recited in **claims 21-24** with a liquid-crystal display comprising a **buffer circuit coupled to the first driver and the second driver** to prevent the alignment signal voltage from flowing to the first driver and the second driver. *There is no drawing to support the features recited in these claims!*

The species are independent or distinct from each other because of their mutually exclusive characteristics recited in different claims as stated above. These species have **different structural layouts of the same elements** as stated above, thus they are not obvious variants based on the current record.

If group I is selected, Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1 and 19 are generic.

There is an examination and search burden for these patentably distinct species due to their mutually exclusive characteristics. The species require a different field of search (e.g., searching different classes/subclasses or electronic resources, or

employing different search queries); and/or the prior art applicable to one species would not likely be applicable to another species; and/or the species are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

**Applicant is advised that the reply to this requirement to be complete must include:**

- (i) an election of a species to be examined** even though the requirement may be traversed (37 CFR 1.143) and
- (ii) identification of the claims and drawings encompassing the elected species, including any drawing(s) and claims** subsequently added.

An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

The election of the species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the election of species requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected species.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the species unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other species.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141.

### ***Conclusion***

Since an election to the restriction is required, a SHORTENED STATUTORY PERIOD for response to this action is set to expire ONE (1) MONTH or THIRTY (30) DAYS, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. §133). Extension of time may be obtained under the provisions of 37 CFR 1.136(a).

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie-Huyen L. Ngo whose telephone number is (571) 272-2295. The examiner can normally be reached on M-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571) 272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2871

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Huyen L. Ngo', with a stylized flourish extending from the end.

Julie-Huyen L. Ngo  
Primary Examiner  
Art Unit 2871